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TITLE: MANUFACTURE OF POROUS MATERIAL
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INVENTOR-INFORMATION:

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ASSIGNEE-INFORMATION:

| | |
|---------------------------|---------|
| NAME | COUNTRY |
| SUMITOMO ELECTRIC IND LTD | N/A |

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ABSTRACT:

PURPOSE: To manufacture uniform inorg, porous material having ≥90% porosity, by mixing metallic powder or ceramic powder with org. bonding material and its solvent, and with an org. foaming agent, by heating so as to cause it to foam and to evaporate the solvent and to solidify the mixture, then by sintering the solidified material.

CONSTITUTION: Metallic powder or ceramic powder is mixed with an org. bonding agent, then with a suitable solvent for said bonding agent to form

fluid suspension. The suspension is mixed uniformly with flaky or powdery org. foaming agent and is caused to foam, at a suitable temp. thereby evaporating the solvent and solidifying the suspension. The solidified suspension is sintered at the sintering temp. for the powder formed from the suspension while decomposing and volatilizing the org. bonding agent and org. foaming, heat-bonding adhesive. The org. foaming agent exhibits excellent dispersibility, and use of a large quantity of the org. foaming agent exerts hardly bad influence. Hence porous material having uniform pore diameter compared with that of products manufactured by conventional methods is obtained.

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